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SUMMARY

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FISHBREEDING IN TROPICAL REGIONS

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FISHBREEDING IN TROPICAL REGIONS.

1. Fishing-breeding in soft water must be regarded as one of the most important factors of rural economy and one of the most important sources of animal protein matters in the alimentation of rural populations of the tropical regions. For centuries, fishbreeding in ponds has been broadly practised in the Far East. Its application happened more recently in the African and American tropical regions, where, in fact, its true expansion goes back to only some fifteen years ago.

2. In the Far East, fishbreeding is practised in pools of brackish water, in ponds of soft water and in ricefields. Brackish water ponds or "tambaks" are particularly numerous in Indonesia and in the Philippines. Their main piscicultural production is that of the Chanos chanos (Milkfish), a fish that grows in the ponds, but the fry of which must be fished in the sea. The average yearly production of the "tambaks" is 225 kg per Ha. In soft water ponds, several species are reared together, the most important one being the common Carp, one form of which with scales and variable coloration is bred. Many other species are also bred. The pools are abundantly manured, especially with organic manure. In Indonesia, this practice permits a yearly average production nearing 200 kg per ha. The Carp is also the main fish for breeding in rice fields; other species are associated with it. According to methods, rice and fish are cultivated alternatively, or both are produced simultaneously. In Indonesia, the average production attains 140 kg per ha.

3. Fishbreeding has developed in many countries in Central Africa since 1946. It is mainly based on utilisation of the Tilapia. These fish reproduce very easily in captivity and accept rearing. They make very good use of vegetables (manioc, leaves, sweet potatoes, etc.), farineous matters and various sorts of refuse. T macrochir and melanopleura were first utilised. Other species (T.nilotica,etc.) were then added; other fish for breeding are now being looked for in other families. Methods of fishbreeding are still being adjusted and one often meets difficulties in obtaining fishes of the same size. In this field one can practise breeding in two stages, or utilize other methods, such as interspecific crossbreeding, or the culture of Tilapia and of one predatory kind. Techniques of breeding still need improvement, but the human surrounding in which they are applied also needs to be improved.

4. In tropical regions, the breeding of fish in soft water ponds can take the character of family or local handycraft occupation or that of commercial or industrial enterprise. Fishbreeding of commercial or industrial character must be practised in pools of a rather large size. Intensification of production should be obtained either through organic or mineral nourishment, or through artificial nourishment. In order to pay, fishbreeding must be practised in economical circumstances, which is for instance possible if the breeding establishment is attached to an agricultural industry which supplies the fattening refuses. Fishbreeding of the family kind is practised in small sized pools. One should aim at intensifying their production, either through the organic manuring that is current practice in the Far East, or through daily artificial alimentation with vegetables and various forms of refuse. Such a practice is only possible if the pool is situated in the immediate vicinity of the fishbreeder's habitation. In this respect, important improvements could be realised in Africa. High production may also be obtained from the interbreeding of species with differing alimentary regimes, or from the mixing of classes of age, which is pretty broadly practised in the Far East and in Africa.

Finally, the depth of the breeding ponds should be sufficient but not exaggerated: one may consider that an average depth of one meter is satisfactory.

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